

B. Claims

Please cancel claim 16 without prejudice or disclaimer and amend claims 1-3, 5-10 and 12-15 as follows. A complete listing of all the claims appears below; this listing replaces all earlier amendments and listings of the claims.

1. (Currently Amended) An image printing method for completing a print process of a pixel by ~~making performing~~ a plurality of ~~scans~~ movements of a print head, which prints dots on a print medium, with respect to the print medium, comprising the steps of:

selecting specification information ~~for specifying one or more scans used to print one or more dots having a single size on the pixel~~ on the basis of a density level of the pixel to be printed, said specification information specifying how many dots of a single size are printed on the pixel to be printed by specifying which one or more movements of the plurality of movements of the print head are used to print a particular dot on the pixel to be printed;

assigning the selected specification information to the pixel; and
printing the one or more dots on the pixel in the one or more ~~scans~~ movements specified by the assigned specification information,

wherein when the density level of the pixel is higher than a predetermined density level, the specification information specifying a combination of the ~~scans~~ movements used to print the dots is selected.

2. (Currently Amended) An image printing method for completing a print process of a pixel by ~~making performing~~ a plurality of ~~scans~~ movements of a print head, which prints dots on a print medium, with respect to the print medium, comprising the steps of:

assigning[[,]] to the pixel[[,]] specification information ~~which specifies the number of one or more dots having a single size corresponding to a density level of the pixel and one or more scans used to print the one or more dots having a single size on the basis of a density level of the pixel to be printed, said specification information specifying how many dots of a single size are printed on the pixel to be printed by specifying which one or more movements of the plurality of movements of the print head are used to print a particular dot on the pixel to be printed~~; and

printing the one or more dots to the pixel in the one or more ~~scans~~ movements specified by the assigned specification information,

wherein when the density level of the pixel is higher than a predetermined density level, the specification information specifying different ~~scans~~ movements used to print the dots is assigned to the pixel in the assigning step.

3. (Currently Amended) An image printing method for completing a print process of a pixel by ~~making performing~~ a plurality of ~~scans~~ movements of a print head, which prints dots on a print medium, with respect to the print medium, comprising the steps of:

assigning to the pixel specification information used to specify which of the

plurality of scans is used to print one dot or each of dots having a single size to be printed for the pixel on the basis of a density level of the pixel selecting specification information on the basis of a density level of the pixel to be printed, said specification information specifying how many dots of a single size are printed on the pixel to be printed by specifying which one or more movements of the plurality of movements of the print head are used to print a particular dot on the pixel to be printed;

generating a print data corresponding to one or more dots to be printed in each scan the one or more movements of the print head on the basis of the specification information assigned to selected for the pixel; and

printing one or more dots to the pixel on the basis of the generated print data,

wherein when the density level of the pixel is a predetermined density level, in the assigning selecting step, one set of specification information is selected from a plurality of sets of specification information specifying different combinations, respectively, as a combination of the seams movements used to print the predetermined number of dots, and the selected specification information is assigned to the pixel.

4. (Previously Presented) The method according to claim 1, wherein a plurality of sets of specification information are prepared in correspondence with each of the density levels of the pixel, and in the selecting step, one of the plurality of sets of specification information corresponding to the density level of the pixel is selected randomly, in a predetermined order, or according to a position of the pixel.

5. (Currently Amended) The method according to claim 1, wherein the plurality of ~~scans~~ movements include both forward and backward ~~scans~~ movements of the print head, and the specification information corresponding to the density level of the pixel which requires to print two or more dots specifies the combination of the ~~scans~~ movements used to print the dots so that dots to be printed are distributed to both the forward and backward ~~scans~~ movements.

6. (Currently Amended) The method according to claim 1, wherein the plurality of ~~scans~~ movements include both forward and backward ~~scans~~ movements of the print head, and the specification information specifies the ~~scans~~ one or more movements used to print the dots so that dots to be printed are distributed to one of the forward and backward ~~scans~~ movements.

7. (Currently Amended) The method according to claim 3, wherein a plurality of sets of specification information corresponding to the predetermined density level are assigned to selected for pixels so that the number of the one or more dots printed in forward ~~scan~~ movement become equal to the number of one or more dots printed in backward ~~scan~~ movement.

8. (Currently Amended) A print data generating method that generates a print data for completing a print process of a pixel by making performing a plurality of ~~scans~~ movements of a print head, which prints dots on a print medium, with respect to the

print medium, comprising the steps of:

selecting specification information for specifying one or more scans used to print one or more dots having a single size on the pixel on the basis of a density level of the pixel to be printed, said specification information specifying how many dots of a single size are printed on the pixel to be printed by specifying which one or more movements of the plurality of movements of the print head are used to print a particular dot on the pixel to be printed;

assigning the selected specification information to the pixel; and generating the print data corresponding to the one or more dots to be printed in each scan the one or more movements of the print head on the basis of the specification information assigned to selected for the pixel,

wherein when the density level of the pixel is higher than a predetermined density level, the specification information specifying a combination of the scans movements used to print the dots is selected.

9. (Currently Amended) A print data generating method that generates a print data for completing a print process of a pixel by making performing a plurality of scans movements of a print head, which prints dots on a print medium, with respect to the print medium, comprising the steps of:

assigning to the pixel specification information used to determine which of the plurality of scans is used to print one dot or each of dots having a single size to be printed for the pixel on the basis of a density level of the pixel selecting specification

information on the basis of a density level of the pixel to be printed, said specification
information specifying how many dots of a single size are printed on the pixel to be printed
by specifying which one or more movements of the plurality of movements of the print
head are used to print a particular dot on the pixel to be printed; and
generating the print data corresponding to the one or more dots to be printed
in each scan the one or more movements of the print head on the basis of the specification
information assigned to selected for the pixel,

wherein when the density level of the pixel is a predetermined density level,
in the assigning selecting step, one set of specification information is selected from a
plurality of sets of specification information specifying different combinations,
respectively, as a combination of the scans movements used to print the predetermined
number of dots, and the selected specification information is assigned to the pixel.

10. (Currently Amended) A print data generating method that generates a
print data for completing a print process of a pixel by making performing a plurality of
scans movements of a print head, which prints dots on a print medium, with respect to the
print medium, comprising the steps of:

assigning[[,]] to the pixel[[,]] specification information which specifies the
number of one or more dots having a single size corresponding to a density level of the
pixel and one or more scans used to print the one or more dots having a single size on the
basis of a density level of the pixel to be printed, said specification information specifying
how many dots of a single size are printed on the pixel to be printed by specifying which

one or more movements of the plurality of movements of the print head are used to print a particular dot on the pixel to be printed; and

generating the print data corresponding to the one or more dots to be printed in ~~each scan~~ the one or more movements of the print head on the basis of the specification information assigned to the pixel,

wherein when the density level of the pixel is higher than a predetermined density level, the specification information specifying different ~~scans~~ movements used to print the dots is assigned to the pixel in the assigning step.

11. (Cancelled)

12. (Currently Amended) An image recording apparatus for completing a print process of a pixel by ~~making~~ performing a plurality of ~~scans~~ movements of a print head, which prints dots on a print medium, with respect to the print medium, comprising:

a memory for storing a plurality of sets of specification information, each of which specifies the number of one or more dots having a single size corresponding to a density level of the pixel and one or more scans used to print the one or more dots having a single size set of specification information specifying how many dots of a single size are printed on the pixel to be printed by specifying which one or more movements of the plurality of movements of the print head are used to print a particular dot on the pixel to be printed;

~~assignment~~ selecting means for selecting one set of specification

information corresponding to the density level of the pixel from the plurality of sets of specification information stored in said memory ~~and assigning the selected specification information to the pixel~~; and

printing control means for causing the print head to print the one or more dots on the pixel by the one or more scans movements specified by the assigned specification information selected by the selecting means,

wherein when the density level of the pixel is higher than a predetermined density level, the specification information specifying different scans movements used to print the dots is assigned to selected for the pixel.

13. (Currently Amended) A computer program product recorded on a computer-readable medium for making a computer generate data to be used in a printer for completing a print process of each pixel by making performing a plurality of scans movements of a print head, which prints dots on a print medium, with respect to the print medium, comprising:

a code for assigning ~~a pattern, used to determine which of the plurality of scans is used to print one or more dots having a single size to be printed for each pixel, to that pixel~~ specification information on the basis of a density level of the pixel to be printed, said specification information specifying how many dots of a single size are printed on the pixel to be printed by specifying which one or more movements of the plurality of movements of the print head are used to print a particular dot on the pixel to be printed;

and

a code for generating the data corresponding to the dots to be printed for respective ~~scans~~ movements of the print head on the basis of the assigned ~~pattern~~ specification information.

14. (Currently Amended) The program product according to claim 13, wherein the code for assigning includes selecting one of ~~patterns~~ set of specification information corresponding to a density level of a pixel of interest and assigning the selected ~~one pattern~~ set of specification information to the pixel of interest.

15. (Currently Amended) The program product according to claim 13, wherein a plurality of ~~patterns~~ sets of specification information is prepared in correspondence with each of the density levels of the pixel, and in the selecting, one of the plurality of ~~patterns~~ sets of specification information corresponding to a density level of a pixel of interest is selected randomly or in a predetermined order.

16. (Cancelled)